## **AZ168**\_

# MINIATURE POWER RELAY

### **FEATURES**

- Side panel mount
- SPDT through 4PDT arrangement
- High switching capacity
- AC and DC coils
- CE marked
- UL, CUR file E43203
- TÜV pending



#### **CONTACTS**

Arrangement	SPDT (1 Form C) DPDT (2 Form C) 3PDT (3 Form C) 4PDT (4 Form C)		
Ratings	See chart on page 2		
UL, CUR	See chart on page 2		
Minimum Load	5 VDC, 0.1 A		
Material	-1CT contact -2C and 2CT contact -3C contact -4C contact	Silver cadmium oxide Silver cerium Silver cerium Silver cerium	
Resistance	< 50 milliohms initially (24 V, 1 A voltage drop method)		

### COIL

Power	
At Pickup Voltage (typical)	DC: 576 mW, 6 to 48 VDC 704 mW, 110 VDC AC: .768 VA
Max. Continuous Dissipation	DC: 1.2 W (110 V : 1.5 W) at 20°C (68°F) AC: 1.7 VA at 20°C (68°F)
Temperature	105°C (221°F)

### **NOTES**

- 1. All values at 20°C (68°F).
- 2. Relay may pull in with less than "Must Operate" value.
- 3. Specifications subject to change without notice.

### **GENERAL DATA**

Life Expectancy Mechanical Electrical	Minimum operations 2 x 10 <sup>7</sup> operations See UL/CUR ratings on page 2		
Operate Time	25 msec max. at nominal coil voltage		
Release Time	25 msec at nominal coil voltage (without suppression)		
Dielectric Strength (at sea level for 1 min.)	1500 Vrms coil to contact 1000 Vrms contact to contact 1000 Vrms between contact sets		
Insulation Resistance	100 megohms min. at 20°C, 500 VDC, 50% RH		
Dropout	DC: > 10% of nominal coil voltage AC: > 30% of nominal coil voltage		
Ambient Temperature Operating Storage	-55°C (-67°F) to 70°C (158°F) -55°C (-67°F) to 105°C (221°F)		
Vibration	0.062" DA at 10-55 Hz		
Shock	20 g		
Enclosure	Polycarbonate		
Terminals	Plug-in		
Max. Solder Temp.	250°C (482°F)		
Max. Solder Time	5 seconds		
Weight	37 grams		



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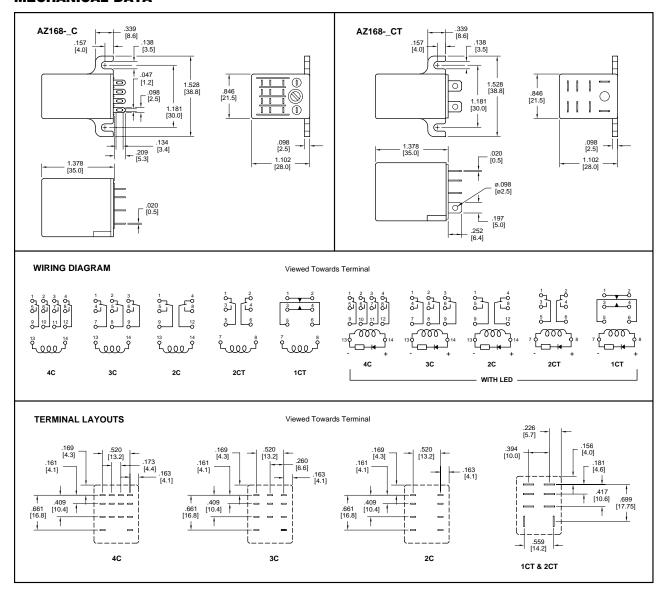
#### **CONTACT RATINGS**

Maximum SPDT Heavy duty, resistive load: Ratings Max. Switched Power: 450 W, 3750 VA Max. Switched Current: 15 A Max. Switched Voltage: 30 VDC, 250 VAC DPDT Heavy duty, resistive load: Max. Switched Power: 300 W, 2500 VA Max. Switched Current: 10 A Max. Switched Voltage: 30 VDC, 250 VAC DPDT Standard duty, resistive load: Max. Switched Power: 210 W, 1750 VA Max. Switched Current: 7 A Max. Switched Voltage: 30 VDC, 250 VAC 3PDT, 4PDT, Standard duty, resistive load: Max. Switched Power: 150 W, 1250 VA Max. Switched Current: 5 A

Max. Switched Voltage: 30 VDC, 250 VAC

**UL/CUR** SPDT Heavy duty: Ratings 15 A, 250 VAC 100k, Resistive 15 A, 30 VDC, 100k N.O., 30k N.C., Resistive **DPDT Heavy duty:** 10 A, 250 VAC, 100k, General use 10 A, 30 VDC, 100k, Resistive 1/3 HP, 120/240 VAC, 100k Motor load DPDT, Standard duty: 7A, 250 VAC, 100k Resistive 7A, 30 VDC, 100k, Resistive 3A, 240 VAC/30 VDC, 100k, General use 3PDT, 4PDT, Standard duty: 5A, 250 VAC, 100k, Resistive 5A, 30 VDC, 100k, Resistive 3A, 240 VAC/30 VDC, 100k, General use

### **MECHANICAL DATA**





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### **RELAY ORDERING DATA**

STANDARD RELAYS: DC Coil					
	COIL SPECIFICATIONS				
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Nominal Current mA ± 10%	Coil Resistance	ORDER NUMBER*
5	4.0	5.5	181.0	27.5 <b>± 10</b> %	AZ168-2C-5D
6	4.8	6.6	150.0	40.0 <b>± 10</b> %	AZ168-2C-6D
12	9.6	13.2	75.0	160 <b>± 10</b> %	AZ168-2C-12D
24	19.2	26.4	36.9	650 <b>± 10</b> %	AZ168-2C-24D
48	38.4	52.8	18.5	2600 <b>± 15</b> %	AZ168-2C-48D
110	88.0	121.0	10.0	11,000 ± <b>15</b> %	AZ168-2C-110D

STANDARD RELAYS: AC Coil (50/60 Hz)  COIL SPECIFICATIONS					1
Nominal Coil VAC	Nominal Coil Must Operate Max. Continuous Nominal Current Coil Resistance				
6	4.8	7.1	200.0	11.5 <b>± 10</b> %	AZ168-2C-6A
12	9.6	14.3	100.0	46.0 <b>± 10</b> %	AZ168-2C-12A
24	19.2	28.6	50.0	184 <b>± 10</b> %	AZ168-2C-24A
48	38.4	57.1	25.0	735 <b>± 10</b> %	AZ168-2C-48A
120	96.0	143.0	10.0	4,550 <b>± 10%</b>	AZ168-2C-120A
220	176.0	261.0	5.5	14,400 <b>± 15%</b>	AZ168-2C-220A
240	192.0	288.0	5.0	22,000 <b>± 15%</b>	AZ168-2C-240A

<sup>\*</sup> For 3PDT or 4PDT substitute "-3C" or "-4C" for "-2C". For LED add "1" to the end of p/n.

#### **RELAY ORDERING DATA**

HEAVY DUTY RELAYS: DC Coil					
COIL SPECIFICATIONS					
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Nominal Current mA ± 10%	Coil Resistance	ORDER NUMBER*
5	4.0	5.5	181.0	27.5 <b>± 10</b> %	AZ168-1CT-5D
6	4.8	6.6	150.0	40.0 <b>± 10</b> %	AZ168-1CT-6D
12	9.6	13.2	75.0	160 <b>± 10</b> %	AZ168-1CT-12D
24	19.2	26.4	36.9	650 <b>± 10</b> %	AZ168-1CT-24D
48	38.4	52.8	18.5	2600 <b>± 15%</b>	AZ168-1CT-48D
110	88.0	121.0	10.0	11,000 <b>± 15%</b>	AZ168-1CT-110D

HEAVY DUTY RELAYS: AC Coil (50/60 Hz)					
	COIL SPECIFICATIONS				
Nominal Coil VAC	Must Operate VAC	Max. Continuous VAC	Nominal Current mA ± 10%	Coil Resistance	ORDER NUMBER*
6	4.8	7.1	200.0	11.5 <b>± 10</b> %	AZ168-1CT-6A
12	9.6	14.3	100.0	46.0 <b>± 10</b> %	AZ168-1CT-12A
24	19.2	28.6	50.0	184 <b>± 10</b> %	AZ168-1CT-24A
48	38.4	57.1	25.0	735 <b>± 10%</b>	AZ168-1CT-48A
120	96.0	143.0	10.0	4,550 <b>± 10%</b>	AZ168-1CT-120A
220	176.0	261.0	5.5	14,400 <b>± 15%</b>	AZ168-1CT-220A
240	192.0	288.0	5.0	22,000 <b>± 15%</b>	AZ168-1CT-240A

<sup>\*</sup> For DPDT substitute "-2CT" for "-1CT". For LED add "1" to the end of p/n



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